Available online at www.sciencedirect.com
SCIENCE DIRECT®
Aquaculture
ELSEVIER
Aquaculture 223 (2003) 189–190
www.elsevier.com/locate/aqua-online

Contents of *Aquaculture*, Volume 223

VOL. 223 NOS. 1–4 **2 June 2003**

Diseases, Parasites and Predators

Killing effect of various treatments on the monogenean *Heterobothrium okamotoi* eggs and oncomiracidia and the ciliate *Cryptocaryon irritans* cysts and theronts
N. Hirazawa, T. Goto and K. Shirasu (Oita, Japan) 1

Functional alterations associated with "winter syndrome" in gilthead sea bream (*Sparus aurata*)
M.Á. Gallardo, M. Sala-Rabanal, A. Ibarz, F. Padrós, J. Blasco, J. Fernández-Borràs and J. Sánchez (Barcelona, Spain) 15

The role of phenoloxidase suppression in QX disease outbreaks among Sydney rock oysters (*Saccostrea glomerata*)
R. Peters and D.A. Raftos (North Ryde, Australia) 29

Toxicity of formalin to bullseye puffer fish (*Sphoeroides annulatus* Jenyns, 1843) and its effectiveness to control ectoparasites
E.J. Fajer-Ávila, I. Abdo-de la Parra, G. Aguilar-Zarate, R. Contreras-Arce, J. Zaldívar-Ramírez and M. Betancourt-Lozano (Mazatlán, Mexico) 41

Husbandry and Management

Soil nitrifying enrichments as biofilter starters in intensive recirculating saline water aquaculture
A. Gross, A. Nemirovsky, D. Zilberg, A. Khaimov, A. Brenner, E. Snir, Z. Ronen and A. Nejidat (Israel) 51

Economics of offshore aquaculture of Pacific threadfin (*Polydactylus sexfilis*) in Hawaii
L.E. Kam, P.S. Leung (Honolulu, HI, USA) and A.C. Ostrowski (Waimanalo, HI, USA) 63

The potential of tropical paracalanid copepods as live feeds in aquaculture
A.D. McKinnon, S. Duggan (Townsville, Australia), P.D. Nichols (Hobart, Australia), M.A. Rimmer, G. Semmens (Cairns, Australia) and B. Robino (Townsville, Australia) 89

Nutrition

Effects of dietary lipid level and source on growth and proximate composition of juvenile redclaw (*Cherax quadricarinatus*) reared under semi-intensive culture conditions
M.P. Hernández-Vergara (Veracruz, Mexico), D.B. Rouse (Auburn, AL, USA), M.A. Olvera-Novoa (Mérida, Mexico) and D.A. Davis (Auburn, AL, USA) 107

Detection of a chromosomal region with two quantitative trait loci, affecting cold tolerance and fish size, in an F_2 tilapia hybrid
A. Cnaani (Israel), E.M. Hallerman (Blacksburg, VA, USA), M. Ron, J.I. Weller (Israel), M. Indelman, Y. Kashi (Haifa, Israel), G.A.E. Gall (Davis, CA, USA) and G. Hulata (Israel) 117

Physiology and Endocrinology

Background colour influence on the stress response in cultured red porgy *Pagrus pagrus*
J. Rotllant (Faro, Portugal), L. Tort (Spain), D. Montero (Las Palmas de Gran Canaria, Spain), M. Pavlidis (Iraklion, Greece), M. Martinez (Spain), S.E. Wendelaar Bonga and P.H.M. Balm (The Netherlands) 129

Attempts to induce an LH surge and ovulation in common carp (*Cyprinus carpio* L.) by differential application of a potent GnRH analogue, azagly-nafarelin, under laboratory, commercial hatchery, and natural conditions
T. Mikolajczyk, J. Chyb, M. Sokolowska-Mikolajczyk (Cracow-Mydlniki, Poland), W.J. Enright (The Netherlands), P. Epler (Cracow-Mydlniki, Poland), M. Filipiak (Poland) and B. Breton (Rennes, France) 141
Investigations on the metabolism of viable and nonviable gilthead sea bream (*Sparus aurata*) eggs
F. Lahnsteiner (Salzburg, Austria) and P. Patarnello (Monfalcone, Italy) 159
Heat shock proteins are not sensitive indicators of hatchery stress in salmon
J. Zarate and T.M. Bradley (Kingston, RI, USA) 175

Contents of *Aquaculture*, Volume 223 189

Contents (continued)

Husbandry and Management

Soil nitrifying enrichments as biofilter starters in intensive recirculating saline water aquaculture
A. Gross, A. Nemirovsky, D. Zilberg, A. Khaimov, A. Brenner, E. Snir, Z. Ronen and A. Nejidat (Israel) 51

Economics of offshore aquaculture of Pacific threadfin (*Polydactylus sexfilis*) in Hawaii
L.E. Kam, P.S. Leung (Honolulu, HI, USA) and A.C. Ostrowski (Waimanalo, HI, USA) . . . 63

The potential of tropical paracalanid copepods as live feeds in aquaculture
A.D. McKinnon, S. Duggan (Townsville, Australia), P.D. Nichols (Hobart, Australia), M.A. Rimmer, G. Semmens (Cairns, Australia) and B. Robino (Townsville, Australia) 89

Nutrition

Effects of dietary lipid level and source on growth and proximate composition of juvenile redclaw (*Cherax quadricarinatus*) reared under semi-intensive culture conditions
M.P. Hernández-Vergara (Veracruz, Mexico), D.B. Rouse (Auburn, AL, USA), M.A. Olvera-Novoa (Mérida, Mexico) and D.A. Davis (Auburn, AL, USA) 107

Detection of a chromosomal region with two quantitative trait loci, affecting cold tolerance and fish size, in an F_2 tilapia hybrid
A. Cnaani (Israel), E.M. Hallerman (Blacksburg, VA, USA), M. Ron, J.I. Weller (Israel), M. Indelman, Y. Kashi (Haifa, Israel), G.A.E. Gall (Davis, CA, USA) and G. Hulata (Israel) 117

Physiology and Endocrinology

Background colour influence on the stress response in cultured red porgy *Pagrus pagrus*
J. Rotllant (Faro, Portugal), L. Tort (Spain), D. Montero (Las Palmas de Gran Canaria, Spain), M. Pavlidis (Iraklion, Greece), M. Martinez (Spain), S.E. Wendelaar Bonga and P.H.M. Balm (The Netherlands) 129

Attempts to induce an LH surge and ovulation in common carp (*Cyprinus carpio* L.) by differential application of a potent GnRH analogue, azagly-nafarelin, under laboratory, commercial hatchery, and natural conditions
T. Mikolajczyk, J. Chyb, M. Sokolowska-Mikolajczyk (Cracow-Mydlniki, Poland), W.J. Enright (The Netherlands), P. Epler (Cracow-Mydlniki, Poland), M. Filipiak (Poland) and B. Breton (Rennes, France) 141

Investigations on the metabolism of viable and nonviable gilthead sea bream (*Sparus aurata*) eggs
F. Lahnsteiner (Salzburg, Austria) and P. Patarnello (Monfalcone, Italy) 159

Heat shock proteins are not sensitive indicators of hatchery stress in salmon
J. Zarate and T.M. Bradley (Kingston, RI, USA) 175

Contents of *Aquaculture*, Volume 223 189